

## REMARKS

### I. Status Summary

Claims 1-24 are pending in the present application. Claims 1-4, 7, 9, 13-18, 20, and 24 have been amended. Claim 19 has been canceled. Therefore, upon entry of this Amendment, Claims 1-18 and 20-24 will be pending. No new matter has been introduced by the present amendment. Reconsideration of the application as amended and based on the arguments set forth hereinbelow is respectfully requested.

### II. Claim Rejections Under 35 U.S.C. § 112

Claims 1-24 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. In particular, regarding Claims 1 and 13, the Examiner stated that the phrase "the number of its resolution levels" is confusing. (Official Action, page 2.) Claims 1 and 13 have been amended to replace the phrase "the number of its resolution levels" with the phrase "the number of the resolution levels of the quantizer". Applicants respectfully submit that the phrase should no longer be confusing because the phrase now clearly refers to the number of resolution levels of the quantizer.

Further, regarding Claims 1 and 13, the Examiner stated that line 2 recites a quantizer that generates a digital input signal and line 17 recites a comparator that generates a digital result. (Official Action, page 2.) The Examiner also stated that it is

not clear whether the term “the digital result output” and the term “digital result” are identical since they originate from different sources. (Official Action, page 2.) In addition, the Examiner stated that the relationship between the quantizer and the comparator is not well established and the inputs and outputs of both elements are not well defined. (Official Action, page 2.) Claims 1 and 13 have been amended to recite that the quantizer outputs the quantized input signal as a digital result value at a digital result output of a sigma delta modulator. In addition, Claim 1 has been amended to recite that the comparison unit outputs a “digital quantizer cell result” rather than a “digital result”. Claim 13 has been amended to recite that a voltage comparator outputs a corresponding digital result bit, where the result bits form the digital result value. Applicants respectfully submit that the amendments to the claims make the relationship between the quantizer and the comparison unit recited by Claim 1 and the voltage comparator of Claim 13. In addition, applicants respectfully submit that the claim amendments better defines the inputs and outputs of these elements. Therefore, applicants respectfully submit that these rejections to Claims 1 and 13 should be withdrawn.

Regarding line 18 of Claim 1, the Examiner stated that the term “the accurate current” lacks antecedent basis. (Official Action, page 3.) In addition, the Examiner stated that the term is unclear because one cannot decipher which of the current previously recited is accurate and why. (Official Action, page 3.) Claim 1 has been amended to replace the phrase “a comparison unit is provided which decides whether the accurate current” with the phrase “a comparison unit coupled to the

current unit for detecting whether the summed up current". Applicants respectfully submit that proper antecedent basis is provided for the term "the summed up current" and that this rejection should now be withdrawn.

Referring to Claim 1, the Examiner also stated that it is not understood how the comparator "decides whether the ... is not equal to zero". (Official Action, page 3.) Further, the Examiner stated that the comparator compares and does not detect. (Official Action, page 3.) The Examiner also stated that if the comparator detects, it must be clearly stated how the detection is made. (Official Action, page 3.) The phrase "comparison unit is provided which decides whether the ... is not equal to zero" has been replaced by the phrase "comparison unit coupled to the current node for detecting whether the summed up current at the current node is not equal to zero". The comparison unit detects that the summed up current at the current node is not equal to zero due to its coupling with the current node. Thus, applicants respectfully submit that Claim 1 clearly recites how the detection is made and that this rejection should be withdrawn.

Regarding Claim 2, the Examiner stated that the term "the analog feedback current" lacks antecedent basis. (Official Action, page 3.) Claim 1 has been amended to recite an analog feedback current. Claim 2 depends from Claim 1. Therefore, it is respectfully submitted that the term "the analog feedback current" recited by Claim 2 now has proper antecedent basis and this rejection should now be withdrawn.

Further, regarding Claim 2, the Examiner stated that the relationship between the term "the digital result value" at line 2 and the term "the result value" at line 4 is not clear. (Official Action, page 3.) Claim 2 has been amended to replace the term "the result value" with the term "the digital result value". Therefore, it should now be clear that the terms are the same. Thus, applicants respectfully submit that this rejection should be withdrawn.

Regarding Claim 13, the Examiner stated that the phrase "the last weighting of the comparators" at line 4 and the phrase "the individual threshold signals" lack antecedent basis. (Official Action, page 3.) Claim 13 has been amended to replace the term "the last weighting of the comparators" with the term "a last output of the comparators". Therefore, applicants respectfully submit that there is no longer an antecedent basis issue and that the rejection should be withdrawn.

Regarding Claim 18, the Examiner stated that the term "the respective comparator" at line 3 and the term "desired threshold signal" at line 4 lack antecedent basis. (Official Action, page 3.) Claim 18 has been amended to delete the terms "the respective comparator" and "desired threshold signal". Therefore, applicants respectfully submit that there is no longer an antecedent basis issue and that the rejection should be withdrawn.

Regarding Claim 19, the Examiner stated that the term "the result bits" lacks antecedent basis. (Official Action, page 3.) The term "result bits" has been deleted from Claim 19. Therefore, applicants respectfully submit that there is no longer an antecedent basis issue and that the rejection should be withdrawn.

Accordingly, based on the above amendments and remarks, applicants respectfully submit that the rejections based on 35 U.S.C. § 112 should now be withdrawn.

### III. Allowable Subject Matter

The Examiner has indicated that Claims 1-24 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. § 112, second paragraph. (Official Action, page 3.) Claim 19 has been canceled. Applicants respectfully submit that the above claim amendments and remarks overcome the rejections to Claims 1-24 under 35 U.S.C. § 112, second paragraph. In addition, applicants respectfully submit that the claim amendments do not broaden the claims. Therefore, applicants respectfully submit that Claims 1-18 and 20-24 are now in condition for allowance and should now be formally allowed.

### CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early notice to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

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DEPOSIT ACCOUNT

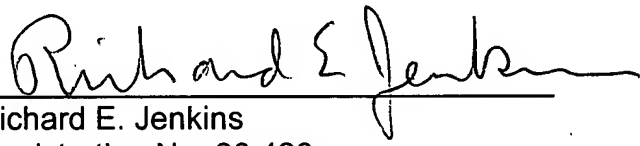
The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

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